ELSEVIER

Journal of Magnetism and Magnetic Materials 242–245 (2002) 1477–1482

Journal of magnetism and magnetic materials

www.elsevier.com/locate/jmmm

Subject index to volumes 242–245

304L steel 1391
3D impurities
—semiconductors 967
3d metals 817

Acoustoelectric effect 707
Actinide compounds 1384
Activation volume 1395
Actuator 1160
AFM 1261
Alloys 943, 1399, 1446
Alumina 943
Amorphous 467
Amorphous glass-covered wires 254
Amorphous systems 108, 294, 621
Amorphous systems
—soft magnet 169
—RE alloys 1310
—soft magnetic 166, 241, 251, 261, 288
—wires 244, 251, 254, 1435
Amorphous wires 224, 265
Amorphous, nanocrystalline and polycrystalline wires 1431
Anisotropic magnetoresistance 1166, 1257
Anisotropy 187, 420, 535, 888, 1372
Anisotropy constants 1341
Anisotropy energy 747
Anisotropy fields 331, 1270
Anisotropy
—amorphous 166
—creep induced 279
—ferrites 1408
—growth induced 378
—growth-induced 1369
—hysteresis curve 1067
—induced 241, 276, 294, 352
—magnetic 66, 370, 391, 631, 1057
—magnetization processes 1064
—magnetocrystalline 132, 402, 686, 829
—magnetoelastic 254
—perpendicular 1038
—random 229
—shape induced 505, 585
—stress-induced 1443
—surface 594, 608
—thin films 169, 984, 1246
—uniaxial 132, 601, 1067, 1350
—unidirectional 1012
—planar 591

Annealing 169, 261, 384, 1112
Antiferromagnetic phase 895
Antiferromagnetism 738, 803, 806, 864
Antiferromagnets 704, 928, 1287, 1418
—frustrated 515
Antiphase boundaries 1221
Atomic force microscopy 338
Attempt frequency 1002
Auger electron spectroscopy 311
Averaging procedure 1218

Ba-ferrite 304
Band calculation 809, 826
Band structure calculations 27
Band structure
—energy 47
Band structures 836
Barkhausen effect 232
Barkhausen noise 1085
Bethe–Peierls 550
Bi-stability 1119
Bilayer 1073
Bitter patterns 1182
Bloch walls 888
Boride phase 1372
Brillouin scattering 535, 591

CEF 858
Charge-ordering 645, 683
Chemical coprecitation 1464
Choke coil 279
Cluster glass 1077
Clusters 366, 754
Co-based alloys 1077
Cobalt ferrite 194
Coercive force 1321
Coercivity 59, 187, 304, 384, 434, 597, 624, 1077, 1270, 1287, 1300, 1329, 1335, 1347, 1369, 1395, 1399, 1425
Coercivity
—angular dependence 395, 1344
—composition dependence 177, 1290
—thickness dependence 1310
Coherence effect 378, 585
Cold-rolling 581
Colossal magnetoresistance 635
Competing interactions 1057
Complex permeability 160, 224, 1142
Complex susceptibility 205
Composites 232, 282

Computational micromagnetism 996
Computer simulation 1018
Conductivity 461
Conformal matter 772
Convergent beam electron diffraction 1325
CoO/Co 958
Cooling 285
Core loss 205
Core materials 282
Correlated electron systems 689, 751
Correlations 1202
Coupled planes 550
Critical length 1439
Cross measurement 970
Cross-spin relaxation 1106
Crossover 1375
Crystal field
—RE compounds 829
Crystal growth 108, 949
Crystal structure 352, 362, 395, 610, 854, 901, 1381
Crystallization 276, 882, 1307
Crystallization
—amorphous ribbons 1297
—amorphous systems 108, 904, 1314
—temperature 1172
Curie temperature 659, 775, 823, 885, 939, 1350
CVD process 1172

DC noise 366
Defect effect 662, 928
Defects 441, 489
Delay line 269
Demagnetization 359
Density functional calculations 27, 441
Depth profile 958
Devices 505, 1453
Devices
—motors 212, 1198, 1214
Dichroism
—circular magnetic 27, 958, 961
Dielectric constant 191
Diffusion 1243
Diffusion
—process 1236
Diluted magnetic semiconductors 13, 441
Diluting magnetic semiconductors 924
Dipolar interactions 1428

0304-8853/02/$ - see front matter
PII: S0304-8853(02)00237-8

Disordered systems 461, 879
Domain dynamics 1097
Domain pattern 21, 597, 772, 1047
Domain structure 163, 391, 420, 1115, 1182, 1257, 1267, 1418
Domain wall 1018
Domain wall dynamics 229, 973, 987, 1085
Domain wall motion 553, 1061
Domain wall pinning 139, 553, 1304, 1350, 1353, 1356
Domain wall velocity 553
Domains 505
Doping effects 645, 659, 1366
Double perovskite 686
Dynamic Jahn–Teller effect 201

Eddy currents 911, 1402
Eddy currents
—loss 212, 1198, 1210
Eigensystem 1230
Electric transport 13
Electrical resistivity 212, 450, 640, 668, 867
Electrical resistivity
—thermal dependence 665
Electrical steel 152, 208, 1153
Electrochemical behavior 850
Electrodeposition 163, 238, 578
Electromagnetic induction 1243
Electromagnetic waves 955
Electron microscopy 108
Electron microscopy, high resolution 610
Electron paramagnetic resonance 901
Electronic structure 710, 931
Ellipsoidal particles 1009
Embedding 1149
Energy minimization 1018
Entropy 735, 870
Epitaxy 489, 565, 568, 692
ESR 939
EXAFS 166, 621, 904
Exchange anisotropy 525
Exchange biasing 139, 515, 529, 544, 958, 961, 1070, 1073, 1112
Exchange coupling 939, 1277
Exchange coupling
—double 655
—insulators 1468
—magnetic 370
—multilayer 538
—oscillations 532
Exchange interactions 741, 823
Excitation 778
Extraordinary Hall effect 90

Faraday rotation 381, 1172
Fast switching 426
Fe alloys 621
Fe–Al 535
Ferrimagnets
—polycrystalline 1224
Ferrite
—hexagonal 1270
Ferrites 529, 617, 1460
Ferrites spinel 381
Ferrites
—hexagonal 423, 430, 1405, 1408
—spinel 157
Ferroelectrics 976
Ferrofluids 613, 1240
Ferromagnetic 532, 955, 1018, 1375
Ferromagnetic clusters 1100
Ferromagnetic cylinder 1005
Ferromagnetic films 492, 578, 964, 1290
Ferromagnetic glass 904
Ferromagnetic material 1136
Ferromagnetic multilayers 437, 538
Ferromagnetic phase 895
Ferromagnetic properties 1391
Ferromagnetic resonance 177, 224, 254, 402, 521, 538, 686, 882, 1021, 1038, 1142
Ferromagnetic semiconductors 105, 648
Ferromagnetic-nanoscale: electrodeposition 492
Ferromagnetism 9, 662
Ferromagnets 1249, 1457
Ferromagnets
—amorphous 1321
—soft 285
Field annealing 467
Field calculations 1186, 1198, 1227, 1230
Field-induced anisotropy 146
Fine particles 617, 621
Finite element method 1195, 1198, 1202, 1218, 1227
First-order transitions 1359, 1362
Fluctuation field 434
Flux creep 1236
FMR 713
Fokker–Planck equation 1002
Fractals 1243

g-factor 686
Garnet-substituted 1172
Garnets 1249
Garnets
—thin films 772, 775
Gd compounds 813
$Gd_3Fe_5O_{12}$ 763
GdIG 763
Giant field-induced strain 1446
Giant magneto-impedance effect 216
Giant magnetoresistance 68, 473, 581, 624, 895
Glass ceramics 398
Glass-coated amorphous microwires 247
GMI 467
GMR 341
Grain boundaries 450, 1329
Grain boundary 1169
Grain size 325, 470, 952
Grain size distribution 311
Grain size. TEM image 398
Grain structure 108, 631
Grain-oriented steel 257
Grains 1224
Granular systems 434, 437, 470, 476, 482, 485, 624, 631, 952
Ground state
—phase diagram 1457

Half-metallic ferromagnetic oxides 98
Half-metallic ferromagnets 489
Hall effect 725, 1178, 1249
Hall resistivity 105, 464
Hard magnetic materials 41, 59, 891, 1300, 1314, 1321, 1366, 1395
Hard magnets 1395
HDDR 1372
Heat conductivity 719
Heat-treatment 1329, 1335
Heisenberg model 1221
Heterogeneous ferromagnets 90
Heusler alloys 1421
Hexagonal ferrite 413
High frequency permeability 146
High pressure 659, 876, 931
High-density recording 398
High-field magnetization 59
High-field measurements 813, 841
High-frequency carrier-type magnetic field sensor 1142
High-frequency permeability 1126
High-silicon steel 208
High-speed forging 1388
High-temperature permanent magnets 1304
Hydrogen absorption 1277
Hydrostatic extrusion 581
Hyperfine field 413
Hyperfine field distribution 621
Hyperfine fields
—magnetic 701
Hyperfine interactions 763, 1106
Hysteresis 77, 116, 888, 987, 1034, 1047, 1089, 1221, 1234, 1317, 1431
Hysteresis curve 847
Hysteresis loops 244, 257, 601, 973, 1112, 1402
Hysteresis loss 152, 1210
Hysteresis model 1067
Hysteresis
—magnetic 1057

Impurities 457
Induced anisotropy 1093
Information storage 108
Information storage-high density recording 388
Information storage
—high density recording 434
—longitudinal 402

—magnetic particles 1067
—perpendicular recording 297, 378
Inter-particle interaction 328
Interaction effects 604, 1287
Interdiffusion 547
Interface effects 447
Interface resistance 541
Interface structure 53, 1012
Interfaces 297
Intergranular coupling 321
Intergranular interactions 952
Intermetallic 907
Intermetallic compounds 66, 797, 836, 841, 885, 1359, 1362
Interparticle interactions 345
Invar alloys 191
Invar effect 781
Iron films 499
Iron–rare earth compounds 1388
Ising ferromagnet 757
Ising model
—spin-1/2 1044
—transverse 1044
Isotope effects 640, 651
Itinerant electrons 813, 839

Jahn–Teller effect 935
Joule heating 952

Kerr effect 244, 265, 964
Kerr loop 1435
Kerr measurements 470, 547, 559, 1081
Kerr rotation 108, 191, 384
Kondo effect 125
Kubo formalism 464

$La_{2/3}Ca_{1/3}MnO_3$ 98
Langevin dynamics 426
Langevin equation 999
Lanthanum strontium manganese oxide 686
Large Barkhausen jump 216, 1439
Laser deposition 157, 391, 1294
$La_{2/3}Sr_{1/3}MnO_3$ 98
Laves phase compounds 839
Line broadening 521
Linear actuator 1195
Linewidth
—frequency dependent 1021
—temperature-dependent 686
Local moments 701
Longitudinal magnetic recording media 321
Lorentz electron microscopy 1073
Lorentz microscopy 180
Low temperature GaAs 967
Low-dimensional systems 735
Low-field MR 1169

Maghemite 588
MAGMAS 1119
Magnetic anisotropy 335, 345, 374, 575
Magnetic birefringence 572
Magnetic bubbles 772
Magnetic circular dichroism, X-ray absorption 861
Magnetic clusters 473, 635, 1310
Magnetic coupling 374
Magnetic coupling interlayer 512
Magnetic coupling
—antiferromagnetic 547
—interlayer 1246
Magnetic defects 1408
Magnetic domain structure 205
Magnetic domains 1081
Magnetic dots 996, 1015
Magnetic entropy 698
Magnetic field 41, 1153, 1253, 1378
Magnetic field calculations 1206
Magnetic films 90, 416
Magnetic fluids 572
Magnetic force 1195
Magnetic force microscopy 585, 588, 1257, 1264, 1267
Magnetic imaging 1253
Magnetic interactions 921, 1103, 1224
Magnetic levitation 285
Magnetic losses 77, 212, 279
Magnetic measurements 33, 359, 668, 683, 729, 809, 826, 829, 850, 924, 1153, 1234, 1402
Magnetic molecular materials 915, 946
Magnetic moments 27, 741, 823, 958, 1190
Magnetic nanoparticles 90, 565
Magnetic ordering, crystallographic 437
Magnetic orientation 601
Magnetic oxides 447, 665, 668, 672, 676, 686, 704, 710, 725, 738, 754, 760, 976
Magnetic particles 335, 348
Magnetic permeability 216
Magnetic phase diagrams 876, 1359
Magnetic phase transitions 931
Magnetic powders 84
Magnetic printing 499
Magnetic properties 33, 235, 624, 844, 854, 1307, 1464
Magnetic recording 163, 304, 423, 430, 499, 1030, 1163
Magnetic recording heads 341, 1182
Magnetic recording media 317, 325, 328, 331, 338, 348, 352, 362, 395, 405, 409, 588, 1249
Magnetic recording
—perpendicular 311, 1294
Magnetic refrigeration 698
Magnetic relaxation 437, 946, 1089
Magnetic scanners 1119
Magnetic semiconductors 967
Magnetic sensor 1160, 1169
Magnetic shape memory alloy 1446
Magnetic silence 1190
Magnetic structure 3, 645, 729, 738
Magnetic surface anisotropy 1081
Magnetic susceptibility 575, 836
Magnetic thin films 187, 348, 362, 1142
Magnetic torque 41
Magnetic transitions 704
Magnetic tunnel junctions 457
Magnetic viscosity 194, 1317, 1468
Magnetic vortices 1015
Magnetisation patterns 499
Magnetisation process 1186
Magnetisation reversal 53, 1073
Magnetite 450, 479, 732, 1097
Magnetization 251, 662, 679, 713, 719, 760, 806, 864, 885, 939, 1157, 1314
Magnetization curves 257, 265
Magnetization processes 77, 257, 996
Magnetization profile 1439
Magnetization reversal 194, 335, 370, 378, 388, 518, 544, 585, 627, 1002, 1097, 1341, 1344
Magnetization ripples 512
Magnetization time dependent 518
Magnetization-circular 294
Magnetization
—bulk 1435
—curves 416, 1012, 1044
—demagnetization 331
—distribution 1227, 1230
—high field 645
—models 1214, 1230
—quantum tunnelling 915, 946, 1106
—remanent 928
—reversal 21, 1070, 1224
—rotation 276, 1064
—surface 1435
—temperature dependent 716
—time dependent 1070, 1453
–demagnetization 1115
Magneto-elastic sensors 1460
Magneto-optical effects 191, 627
Magneto-optical films 381
Magneto-optical properties 173, 473
Magneto-optics 535, 907, 964, 980
Magneto-volume effect 781
Magnetocaloric effects 760, 841, 870, 873
Magnetocrystalline anisotropy 321, 832, 844, 1356, 1362, 1384
Magnetodynamics 1005
Magnetoelastic anisotropy 247
Magnetoelastic coupling 788
Magnetoelastic deformation 1446
Magnetoelastic effect 251, 1126
Magnetoelastic energy 1428
Magnetoelastic waves 1431
Magnetoelasticity 269
Magnetoimpedance 238, 288, 291, 294
Magnetomechanical coupling 241
Magnetometry 911, 964, 984, 993
Magnetoresistance 13, 47, 201, 461, 476, 479, 651, 659, 668, 679, 692, 701, 725, 729, 921, 1132

Magnetoresistance
—giant 495, 631, 648, 689, 797, 952
—melt-spun ribbons 273
—multilayer 541
—theory 453, 482
—thin films 450, 707
—transition metals 695
Magnetoresistive sensors 98
Magnetostatic 1024
Magnetostriction 66, 269, 581, 788, 1119, 1132, 1163, 1411, 1418, 1443, 1450, 1457, 1460
Magnetostriction
—giant 648
—saturation 1218
—stress dependence 1435
—surface 1428
—zero 251
Magnetostrictive materials 1425
Magnetostrictive wires 1431
Magnetron sputtering 374
Manganites 640, 655, 679, 686, 1166
Martensitic transformations 1421, 1446
Material testing 1253
MBE 967
ME tape 345
Mean-field approximation 817, 1030
Mechanical alloying 885, 1103
Medical applications 41
Medium frequency 1210
Melt-spun permanent magnets 1304
Melt-spun ribbon 1307
MEMS 1146, 1149
Metal evaporated tape 355
Metallic glasses 847
Metal–insulator phase transitions 447
Metamagnetic transition 873
Metamagnetism 803, 876
Metastable phases 285, 288
Micro coils 1149
Micro inductor 146
Micro-magnetic structures 1119
Microdomains 1249
Microinductor 1206
Micromagnetic calculation 405, 409, 553, 1038, 1047, 1052, 1257, 1267
Micromagnetism 426, 594, 1024, 1097, 1356
Microstructures 355, 362, 949, 1119, 1186, 1329, 1353
Modelling 1190, 1210
Monte Carlo simulations 1221
MR 1175
Mössbauer spectra 1411
Mössbauer spectrometry
—amorphous alloys 1310
Mössbauer spectroscopy 197, 201, 273, 413, 423, 613, 621, 747, 806
Mössbauer spectroscopy on Fe-alloys 208
Mössbauer spectroscopy
—Fe compounds 744
Mössbauer spectroscopy
—ferrites 1405
—RE-TM compounds 1338
—RE–TM compounds 1297
Multilayer film 943
Multilayers 544, 547, 1411, 1425
Multilayers metallic 518
Muon spin rotation 635

Nanocrystalline alloys 1077
Nanocrystalline materials 84, 180, 229, 235, 265, 282, 325, 1093, 1109, 1277, 1366, 1443
Nanocrystallization 273
Nanodot 1024
Nanogranular alloy 470, 627
Nanogranular alloy films 420
Nanoparticles 21, 132, 317, 505, 568, 572, 594, 597, 604, 608, 610, 627, 993, 1021, 1034, 1103
Nanowires 1061
Néel theory 1034
Neutron depolarization 1115
Neutron diffraction 59, 201, 738, 747, 803, 832, 839
Neutron scattering 689
Neutron scattering
—polarised 781
Nickel ferrite 572
NMR 635, 668, 763, 935, 1139
NMR
—spin echo 235, 672, 676, 701, 732, 766, 769, 1408
Noise reduction 398
Non-Fermi liquid 125
Non-linear transport 485
Non-uniform micromagnetic states 1009
Nuclear magnetic resonance 943
Numerical micromagnetics 999
Numerical simulations 291, 1061, 1198, 1227, 1234, 1236, 1240

Object-oriented software 1234
One-dimensional systems 1061
Optical cross-connect 1119
Optical phonons 651
Order–disorder 208
Overwrite 398
Oxidation 1338

Parallel permeability 247
Paramagnetic resonance 1100
Particle-Ba ferrite 328
Particles-size 850
Particulate recording media 366
Pattern formation 578
Percolation 640, 1103
Permalloy 173, 1182, 1267
Permalloy thin films 521, 1119
Permanent magnet
—rare earth 1329
Permanent magnets 1136, 1270, 1277, 1325, 1381, 1388
—rare earth 1338, 1341, 1344, 1369
Permeability 84, 157, 279, 282
Permeability-complex 970
Perovskite manganites 698
Perovskite structure 544, 645, 648, 662, 672, 676, 692, 722, 744, 751, 760, 935
Perovskites 719
Perpendicular magnetic recording 304
Perpendicular recording 426
Phase angle 1175
Phase separation 1100
Phase shift 964
Phase transition-amorphous-crystalline 108
Phase transitions 66, 655, 891, 898
—electronic 645
—magnetic 935, 1457
—martensitic-like 1457
—metal–insulator 751
—second-order 716
—spin reorientation 955
—structural 1457
Phonons
—bottleneck 1106
Photoacoustic effect 716
PHR 1175
Piezoelectric-magnetostrictive materials 1160
Planar hall effect 525
Planar heads 341
Planarization 1149
Plastic deformation 152
Point-contact spectroscopy 858, 867
Polar Kerr effect 907
Polarons 635, 665
Polymer-bonded composites 1460
Powder metallurgy 232
Power meter 1175
Power transformers 1210
Precipitation 1356
Preisach model 1030, 1034
Pressure effect 757, 797
Propulsion motor 1190
Pulsed laser deposition 529, 565, 1290
Pyrochlores 725

Quadrupolar interaction
—splitting 935
Quality factor optimization 1206

Raman scattering 1405
Random anisotropy 1089
Random magnetic field 550
Rare earth 568, 1375
Rare earth alloys 1366
Rare earth intermetallics 854
Rare earth magnets 1284
Rare earth permanent magnets 1304, 1335, 1347

Rare-earth–transition-metal compounds 803, 823, 832, 844, 850, 861, 864, 873, 1064, 1290, 1381, 1384
Rare earth-transition compounds
— interstitial nitride 59
Rare earth-transition metal alloys 806, 847
Rare earth
—intermetallic compounds 125
—ions 1106
—permanent magnets 1195, 1294, 1353
—transition metal amorphous compound 1178
Rare-earth 532
Rare-earth alloys 1314
Rare-earth intermetallic compounds 809, 826, 876
Rare-earth permanent magnet 1186
Rare-earth–intermetallic compounds 870
RE coumpounds 817
Re-entrant spin glass 1115
Relaxation 288, 518
Relaxation effect 604, 973
Relaxation
—magnetic 631
—nuclear 672, 676
Remanence 1287
Remanence curves 297, 345, 1057
Resistivity 662, 719, 797
—temperature dependent 716
Resonance
—ferromagnetic 970
Resonant tunneling 457
Reversal mechanism 355, 395, 1103
RF sputtering 692
Rotating cryostat 183

Sacrificial layer 1146
Sandwiches 1411
Saturation induction 1136
Saturation magnetization 775
Scaling 608
Scanning 1378
Scattering theory 3
Screen printed sensors 98
Semiconductor–metallic transition 679
Semiconductors 704
—III–V 489
—magnetic 13
Sensor devices 216
Sensors 1132, 1136, 1153, 1166, 1202, 1253
—magnetostrictive 241, 1163, 1443
Severe plastic deformation 1399
Shape induced anisotropy 1257
Shape memory alloys 1421
Si-steels 205
Silicon steel 212
Simulation 341, 1024
Single-domain radius 1009
Sintered magnets 1329, 1347, 1375
Skin effect 33, 1210, 1243
Sm doping 1464
Small particles 575, 591
Smart actuator 1163
Soft ferrite 160
Soft magnetic amorphous systems 1093
Soft-magnetic films 146, 180
Soft magnetic materials 33, 77, 163, 177, 232, 235, 269, 325, 499, 1085, 1425
Solid solutions 741, 879
Solitons 1015
Sol–gel 430, 1169
Sol–gel method 197, 413, 692
Specific heat 617, 683, 695, 813
Specific heat
—low temperature 915
—temperature dependent 735
Spectroscopy time domain 559
Spectroscopy-point contact 722
Spin correlations 778
Spin diffusion 479
Spin dynamics 559
Spin echo 1139
Spin electronics 105
Spin fluctuations 839
Spin freezing 617, 946
Spin glass 879, 924
Spin glass state 921
Spin injection 68, 105, 479
Spin polarization 47
Spin reorientation 1384
Spin reorientation transitions 832, 1246
Spin valves 53, 1132
Spin waves 689
—theory 1041
—surface modes 591
Spin-dependent scattering 482, 541
Spin-glass 125
Spin-glass state 895
Spinel 921
Spin–orbit interaction 461, 464
Spin–phonon interactions 915, 1106
Sputtering 492
Sputtering magnetron 541, 1284
Sputtering
—ion beam 775
SQUID 132, 924, 993, 1139
Sr hexaferrite 1464
Sr_2FeMoO_6 98
Stability 1381
Stainless steel 1391
Statistical model 366
Step edge decoration 565
Stoner–Wohlfarth model 132, 993, 1093, 1468
Stray field 1224
Stress effect 254
Stress relieving 152
Stress sensors 1126
Stress-induced anisotropy 521
Stress
—tensile 276
Stripe magnetic domains 1264
Structural disorder 729
Structural ordering 744
Structural phase transition 713
Structural relaxation 904
Structure 844, 1307
Structuring 1146
Substitution effects 423, 430, 1270, 1405
Superconductivity 9
—magnetic 829
Superconductors
—high-T_c 1236
Superparamagnetic particles 613
Superparamagnetism 473, 624, 850, 952, 1021, 1077, 1109
Surface crystalline 467
Surface effects 575, 613
Surface magnetism 710
Surface spin waves 608
Surface structure 980
Surface waves 980
Susceptibility
—complex 261
—magnetic 901
—paramagnetic 809, 826
—relaxation 261
—static 1044
—transverse 331
—AC 624
Switching field 216, 1439
Switching time 1002
Synchrotron radiation 3

Temperature effects 1034, 1468
Terfenol 1453
Ternary nitrides 1388
Texture 317, 1218, 1277, 1284, 1290
Thermal activation 993, 999, 1073
Thermal conductivity 640
Thermal stability 328, 335, 388, 405, 409, 1052, 1335
Thermodynamics 891
Thermoelectric transport 665
Thermomagnetic analysis 898
Thermomagnetic properties 698
Thermomagnetics 888, 1378
Thermopower 867
Thickness phase transition 1081
Thin film growth 1284
Thin films 108, 183, 304, 374, 384, 476, 515, 529, 594, 958, 1126, 1132, 1264, 1300, 1411
Thin films sputtering 381
Thin films
—amorphous 166
—bilayer 1012
—epitaxial 173, 1294, 1450
—ferromagnetic 177, 416, 970, 1038, 1428

—magnetic 370, 391, 578, 710, 984, 1172
—monolayer 157, 1041
—multilayer 297, 541, 601, 973
—permalloy 559, 1047
—sandwich 291, 495
—sputtered 317, 949
—thickness 447, 1157
—trilayer 453, 532
Thin-film synthesis 405, 409
Tight-binding calculation 457
Torque magnetometry 984, 1157
Transducers 1240
Transformers 84, 212
Transient performance 1214
Transition metal-alloys 27
Transition metal
—films 416
Transition temperature 550
Transmission electron microscope 53, 311
Transmission electron microscopy 362, 588, 1325, 1353
Transport properties 453, 495
Transverse susceptibility 604
Triangular lattice 772
Tunnel junctions 68
Tunnel magnetoresistance 105
Tunneling 47, 453, 476, 485, 495, 512, 722, 1261
Two-dimensional systems 778

UHF (ultra-high frequency) 970
Ultra high vacuum method 568
Ultrafine-grained structure 1399
Ultrasonic attenuation 707
Ultrasonic velocity 713
Ultrathin cobalt film 1081
Uniaxial anisotropy 183
Unidirectional anisotropy 139, 847
Uranium 907

Valence states 741
Vibrating sample magnetometer 197, 1157
Vicinal surfaces 1041
Viscoelastic strain 1453
Vortex 1005

X-ray absorption 958
X-ray dichroism 961, 1246
X-ray diffraction 352, 931, 1112, 1350
X-ray phase analysis 885
X–ray photoelectron spectroscopy 864
X-ray scattering 610
XY model 778

YIG ferrites 763
Yttrium iron garnet 766, 769

ELSEVIER

Journal of Magnetism and Magnetic Materials 242–245 (2002) 1483–1484

Journal of magnetism and magnetic materials

www.elsevier.com/locate/jmmm

Materials index to volumes 242–245

Ag 479, 581
Ag–Fe 952
Al 535, 601, 911
Al_2O_3 476, 485, 521, 575, 943, 1261
AlMnAs 967
AlN 304
Au 532, 958, 1081

B 434
Ba ferrites 304, 328, 391, 423, 430, 1468
Ba–La–Fe–Co–O 1395
Ba–Sr ferrites 413
Bi garnet 1172
$Bi_3Fe_5O_{12}$ 775
$BiMnO_3$ 976
(Bi, Sr)MnO_3 645

Ca_2FeMoO_6 1221
$Ca_3Co_2O_6$ 757
Carbon 317
(Ca, Sm)MnO_3 695
$CdCr_2Se_4$ 924
(Cd, Mn)Te 13
Ce_2Fe_{17} 797, 876
Ce–Ni–Cu 125
Co 47, 132, 139, 297, 362, 370, 374, 492, 515, 518, 547, 575, 578, 591, 601, 604, 958, 961, 973, 984, 996, 1057, 1081, 1246, 1257
Co ferrites 194, 1460
$(Co, Mn)_2P$ 931
Co_2NbSn 888
CoFe 476, 485, 512, 943
$CoFe_{1.9}La_{0.1}O_4$ 197
$CoFe_{1.9}Y_{0.1}O_4$ 197
$CoFe_2O_4$ 613
CoN 384
Co–Ag 90
Co–alloys 352
Co–B 1126
Co–Cr 378
Co–Cr–Nb–Pt 311
Co–Cr–Pt–Ta 321, 388, 402
Co–Cr–Ta 325, 395, 398
Co–Cu 473, 624
Co–Fe 1070, 1073
Co–Fe–Cr–Si–B 241
Co–Fe–Mo–Si–B 169
Co–Fe–Ni–B–Si 247, 261
Co–Fe–Si–B 244, 251, 254, 288, 294, 467
Co–Fe–Si–B–Nb 224
Co–Mn–Si–B 216
Co–Nb 993
Co–Nb–Cu–Si–B 1077
Co–Nb–Zr 169, 970, 1142
Co–Ni 345, 370, 608, 627
Co–Ni–Fe 163
Co–Ni–Mg–N 416
Co–Ni–O 378
Co–P 238
Co–Pt 90, 434
Co–Rh 610
Co–Si–B 1439
Co–Zr–Gd 1178
CoO 139, 362, 958
CoPt 27
$CoPt_3$ 420
CoPt 437
Cr 395
Cr–alloys 352
Cr–Fe–Mn 895
Cr–V 388
CrO_2 13, 98
Cu 291, 538, 541, 879, 911, 1246
CuAu 538
CuC_{12} 939
Cu–Cr–Sb–S 921

$ErCo_2$ 873
$ErTbCo_2$ 870
(Eu, Nd, Sr)MnO_3 648

Fe 183, 335, 499, 532, 535, 565, 581, 597, 601, 631
Fe_8 915
Fe 973, 984, 1103
Fe garnets 1249
Fe_3O_4 381, 381, 381, 450, 479
$FeAlO_4$ 732
FeCo 1126, 1132
FeMn 879
Fe–Al–Cu–Nb–Si–B 177
Fe–B–Si–C 216
Fe–Co 285, 1428
Fe–Co–B 1085
Fe–Co–B–Si 146, 1126
Fe–Co–Mo–Si–B 970
Fe–Co–Si–B 33, 1163
Fe–Cu–Nb–Si–B 84, 216, 229, 265, 276, 279
Fe–Cu–Zr–B 882
FeNiMn 1115
Fe–Mn 525
Fe–Nb–B 235
Fe–Nb–Cu–Si–B 1431, 1443
Fe–Ni 191, 291, 781
Fe–Ni–Co–Zr–Cu–Nb–B 904
Fe–Pr–B 1399
Fe–Pt 891
Fe–Si 166, 187, 208, 257
Fe–Si–B 269, 1431, 1435
Fe–Si–B–Nb–Cu 282, 1109
Fe–Ta–C 325
Fe–Ta–N 146
Fe–Zr(N) 180
Fe–Zr–B 621
Fe–Zr–Cu 273
Fe–Zr–Cu–Ru 273
FePd 66
FePt 27, 317
Ferrite 157

γ-Fe_2O_3 381
GaAs 470, 489, 597
(Ga, Mn)As 13, 105, 441
Garnet 763, 766
$GdBaCo_2O_{5.5}$ 751
(Gd, Ce)Co_4B 809
Gd–Co 547
$GdFe_2Ge_2$ 813
$GdNi_3Al_{16}$ 864
Gd–Ni–Cu 125
Gd–Pt–Cu 125
(Gd, Y)Co_3 817
Ge 719

$HoCo_2$ 873
$HoCu_5$ 858
HoFe11Ti 1064

Ir–Mn 1070, 1073

$KCuF_3$ 935

La–Ca–Mn–O 544, 692
(La, Ba)MnO_3 698
(La, Ca)MnO_3 447
(La, Ca)MnO_3 665, 676, 698, 707, 716, 719
(La, Ca, Cd)MnO_3 679

0304-8853/02/$ - see front matter
PII: S0304-8853(02)00240-8

La–Co ferrites 1270, 1408
(La, Nd, Ca)MnO_3 651
La–Ni–Mn–Al–Co–Fe 850
(La, Pr, Ca)MnO_3 640
$La_{0.7}Sr_{0.3}MnO_3$ 710
(La, Sr)$_2FeO_4$ 741
(La, Sr)$_3Mn_2O_7$ 686
(La, Sr)CoO_3 754, 760
(La, Sr)MnO_3 447
(La, Sr)MnO_3 668, 689, 698, 713, 722, 1166, 1169
(La, Zn)MnO_3 659
Li(Y–Ho)F_4 1106
$LiFeO_2$ 738
Lu_2Fe_{17} 876

Maghemite 588
Manganites 635, 655, 672, 704
$Mn_{1.6}Fe_{1.4}O_4$ 381
Mn_{12}–methanoate 946
MnAs 470
MnF_2 928
$MnFe_2O_4$ 617

NaV_2O_5 735
NdCu 867
NdFeB 1378
Nd–Fe–Al 847, 1310, 1321
Nd–Fe–Al–B 1314
Nd–Fe–B 41, 1277, 1284, 1294, 1300, 1325, 1369, 1375
Nd–Fe–Mo–N 1338
Nd–Fe–Pb–B 1366
Nd–Fe–Ti–Nb 1381
Nd–Fe–V 1388
(Nd, La)–Fe–Al 803
Nd–Pr–B–Al–Cu–Co–Fe 1329
(Nd, Sr, Ca)MnO_3 683
(Nd, Tb)–Fe–Mo 820
Ni 90, 492, 518, 1246, 1264
Ni_2MnGa 66, 781, 1421
Ni_3Fe 885
Ni_3Fe–N 949
$NiFe_2O_4$ 529, 572
NiMnSb 489
Ni–Fe 163, 525, 1175, 1182
Ni–H 898
Ni–Mn–Ga 1446
Ni–Zn ferrites 160
NiO 515, 529, 1175, 1287
NpO_2 3

Pd 297
Permalloy 21, 173, 505, 521, 538, 541, 585, 1047, 1267
(Pr, Ba)MnO_3 662
Pr_2(Fe–Co–Zr)$_{14}$B 1372
$Pr_2Co_{17-x}Fe_x$ 1359, 1362
$PrCo_4Al$ 832
Pr–Fe–B 1277, 1375, 1395
(Pr,Tb)$_2$(Fe,Nb)$_{14}$B 1307
Pt 601
PtMn 961
PtMnSb 384
Pt–Mn–Cr 1112
PZT 1163

$R_{12}M_6Sn$ 854
$R_2Fe_{17}N_3$ 59
$RE_6Fe_{13}X$ 806
Ru 512

Si 291
Si steel 152, 205, 212
SiO_2 437, 627, 631, 1103
$SmFe_2$ 581, 1450
Sm–Co 1146, 1277, 1287, 1290
Sm–Co–Cu 1317
Sm–Co–Cu–Ti 1350
Sm–Co–Fe–Cu–Zr 1304, 1335, 1347, 1353, 1356
Sm–Co–Ti 1350
Sm–Fe–B 1297
Sm–Fe–N 1341, 1344, 1395
(Sm, Nd, Pr)–Co–Mn 844
(Sr, Ba)$_2FeMoO_6$ 747
Sr ferrite 1405
Sr ferrites 1249
Sr hexaferrites 1464
Sr_2FeMoO_6 98, 701, 729, 744
Steel 1153, 1218, 1391
Sulfur spinel 201

Tb 532, 568
Tb_5(Si, Ge)$_4$ 841
Tb–Dy–Fe 1453
Tb–Fe–Co 1411, 1425
(Tb, Nd, Sr)MnO_3 648
Ti–Mn–Sb 901
Ti–Sr–Sb 901
(Ti, Sc)Fe_2 839
$Tl_2Mn_2O_7$ 725

UGa_2 907
U–Fe–Si–C 1384
UO_2 3

(Y, Dy)Ba_2Cu3O6 1100
Y(Fe, Si)$_{11}$Ti 823
$Y_2Co_{17-x}Fe_x$ 1359
Y_2Fe_{17} 876
Y_3(Co, M)$_{11}B_4$ 826
YCo_4Al 832
YCo_4B 861
$YDyNi_2B_2C$ 829
$YFe_{2-x}V_x$ 836
YIG 769
$YMnO_3$ 976
Y–Co–Fe–Cu–Zr 1335
Y–Fe 1425